

# AN EXPLORATORY STUDY OF QUALITY OF LIFE AND PERCEPTION OF ENVIRONMENTAL POLLUTION IN TARANTO, ITALY

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**Background and Aims:** WHO has defined the city of Taranto (Apulia, South-Eastern Italy) as a high environmental crisis risk area with excess total and cancer mortality<sup>1</sup>. Since the late '60's, heavy industries (steel & cement plants, oil refinery) have been located very near residential areas. There are no studies investigating residents' perception of environmental pollution in Taranto<sup>2-4</sup>.

**Methods:** We used qualitative and quantitative methods to assess perception of environmental quality, pollution and quality of life (QOL) in a convenience sample of high-school parents (N=118). A survey questionnaire for assessing demographics, perception of environmental quality via visual analogue scales (VAS) and the Italian version of WHOQOL-BREF were used<sup>5</sup>. We also conducted qualitative interviews with 27 subjects to further illustrate residents' perception of their environment.

**Results:** The subjects' (50 men, 67 women), mean age was 47.25±13.41. Majority were married (71.8%), had a high-school diploma or above (87%), lived with others (92.8%), were employed with regular (93.0%) low-to-middle income (<=2000 €, 68.6%). Subjects' mean rating of components of the environment in Taranto (VAS) were 22.7% air, 41.94% drinking water, 44.96 % sea water, 38.37 % other water, 37.76 % soil, 47.95% meat, 44.33% poultry, 55.72 % shellfish, 58.74% fish and 45.83% produce. Mean WHOQOL-BREF scores for the physical (71.39±14.56), psychological (59.40±9.26) and environmental (52.68±13.84) domains were significantly lower than Italian population norms ( $t_{phy}=5.48$ , ,  $p<.001$ ;  $t_{psy}=10.27$ ,  $p<.001$ ,  $t_{env}=5.47$ ,  $p<.001$ ;  $df=494$ ) but not social relationships (70.47±16.47)<sup>6</sup>. Qualitative analysis revealed main themes of discourse as: difficulty breathing mornings and evenings, noxious air, ability to tell refinery and steel factory emissions apart by smell, reminiscence of childhood with cleaner environment, expression of helplessness regarding environmental pollution.

**Conclusions:** The results of our study show lower QOL, grim perception of the environment in a sample of Taranto residents; indicating a need for large scale, population-based studies investigating QOL effects of environmental pollution in the region.

## References:

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